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Slee Off-Road 1998-07 Land Cruiser / LX470 Dual Swing-Out Rear Bumper (SOF1305) - Installation Instructions



Thank you for your purchase from Slee Off-Road! If you should have any questions or concerns, please don't hesitate to contact us immediately at 1 888 4X4 SLEE or at sales@sleeoffroad.com.

Slee Off-Road strives to provide comprehensive installation instructions. However, in some circumstances minor inconsistencies may be encountered with instructions and or provided parts. If you encounter such an inconsistency, please notify us, as your input is important.

Slee Off-Road guarantees all parts free from defects for one year from the original purchase date.

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Bumper Parts List

Qty	Part Description	Qty	Part Description
1	Slee Bumper Channel	4	1/2" x 2" Bolts – Grade 8
1	Passenger Side Frame Bracket	2	1/2" x 1.5" bolts – Grade 8
1	Driver side Frame Bracket	16	1/2" Flat Washer – Large – Grade 8
8	14mm x 40mm Bolts	10	1/2" Flat Washers – Small - Grade 8
16	12mm x 45mm Bolts	12	1/2" Lock Washers – Grade 8
6	12mm x 45mm Bolts	6	1/2" Nuts – Grade 8
2	Thin Shims	2	Thick Shims

Tire Carrier Parts List

Qty	Part Description	Qty	Part Description
1	Tire Carrier Swing Out	1	LED License Plate Light - with Two Bolts and Nuts
1	U Latch, Latch Hook - with Hardware	1	Hi-Lift Clamp Bracket
1	Stainless Steel Locking Pin (Pre-Installed)	1	Tire Mount Bracket
2	Spindle Bearings (1 x Large and 1 x Small)	1	Slide Plate
1	Aluminum Hubcap with Slee Logo (Pre-Installed)	2	Small Rivets (Hammer In Type)
1	O-Ring For Hub Cap (Pre-Installed)	6	5/16" x 1/2" Bolts – Grade 5
1	Hub Seal	6	5/16" Lock Washer – Grade 5
1	Spindle Castle Nut	2	1/4" x 1/2" Machine Thread Phillips Screws (License Plate)
1	Spindle Flat Washer	1	8mm Socket Head Cap Screw - Hi-Lift Base
1	Cotter Pin	1	8mm Nut - Hi-Lift Base
3	Lug Nuts	1	5/16" Nylock Nut
2	Wire Clips	1	5/16" Flat Washer – Small – Grade 8
2	Self-Tapping Screws	3	3/8" x 1 1/2" Bolts – Grade 5
1	Black Nylon Pad	6	3/8" Thick Flat Washer – Grade 5
1	3/8" Nut Plate	3	3/8" Nylock Nuts – Grade 5
2	Nylon Shim Plates (Used for adjustment of Nylon Pad if necessary)	1	3/8" Barrel Nut
1	Rubber Bump Stop	2	Countersunk Stainless 3/8" Allen Bolts
3	8" Zip Ties		

Ladder Carrier Parts List

Qty	Part Description	Qty	Part Description
1	Slee Ladder Carrier	6	5/16" x 1/2" Bolts – Grade 5
1	U Latch, Latch Hook - with Hardware	6	5/16" Split Washer – Grade 5
1	Stainless Steel Locking Pin (Pre-Installed)	1	5/16" Nylock Nut
2	Spindle Bearings (1 x Large and 1 x Small)	1	5/16" Flat Washer – Grade 8
1	Aluminum Hub Cap – with Slee Logo	2	Countersunk Stainless 3/8" Allen head Bolts
1	O-Ring For Hub Cap (Pre-Installed)	1	Rubber Bump Stop
1	Hub Seal	1	Slide Plate
1	Spindle Castle Nut	2	Small Rivets (Hammer In Type)
1	Spindle Flat Washer	1	Black Nylon Pad
1	Cotter Pin	1	3/8" Nut Plate
		2	Nylon Shim Plates (Used for adjustment of Nylon Pad if necessary)



Step 1.
Install the Nylon Pad(s) using the two 3/8"x 3/4" counter sunk stainless Allen head screws with the nut plates. Don't tighten the Allen head screws to allow for shims to be installed if adjustment is necessary once carrier(s) are installed. The beveled edge faces the rear of the vehicle (as shown). **Note;** each carrier has one Nylon pad, nut plate and two shims.







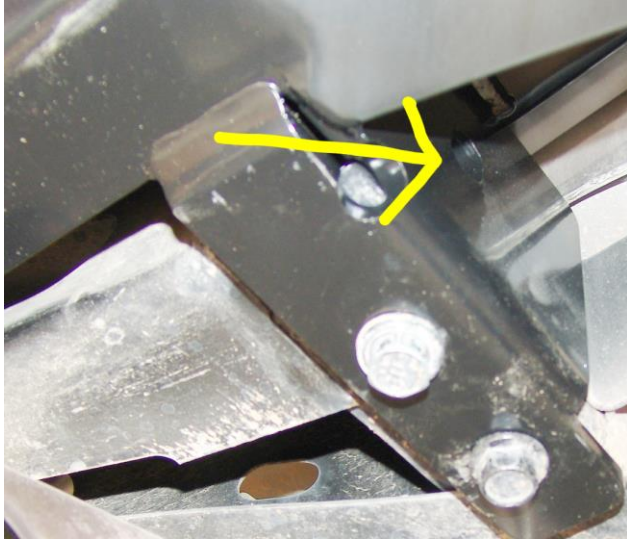
Step 2.
Install the stainless steel slide plates next to the spindles. The plates are installed using the supplied rivets. The rivets are tapped in with a hammer and will seat themselves when pounded in.

Start by gently tapping it into the hole and once the rivet is aligned properly tap it in, until properly seated.

The large slider plate is on the left side, and the smaller one on the right side.

Step 4.
If the spindles are covered with protective sleeves, unscrew them from the spindles.

BUMPER CHANNEL INSTALLATION	
	<p>Step 1. Remove rear mud flaps. Remove rear bumper. Remove all brackets and bolts from rear cross member. Also remove tow hitch if so fitted.</p>
	<p>Step 2. On the driver side reinstall the bolts that attach the rubber splash guard to the body.</p>
	<p>Step 3. Slide the bumper over the rear cross member with the fronts of the wings pointing downwards. Gradually lift the front wings as the bumper is being slid forward. Be careful to not hit the vehicle body with the wings or the back end of the bumper.</p>
	<p>Step 4. Once bumper is located, install the four 14mm x 40mm bolts, split and flat washers through bottom brackets into the captive nuts in the frame rail. Run bolts in, but do not tighten.</p> <p>Install the 1/2" x 1.5" bolts through the side holes of the bumper (indicated by the yellow arrow). Use flat washers, lock washer and 1/2" nut.</p>

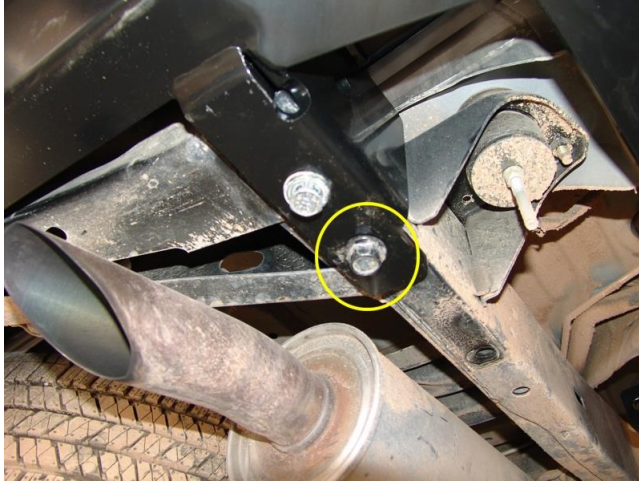


Step 5.
Attach side brackets to the frame rail using two 14mm x 40mm bolts, split washers and flat washers. Do not tighten bolts. Just leave finger tight. (1998/1999 years might be 12mm bolts.)



Step 6.
Attach the bumper wings to the side brackets using the 1/2" x 2" bolts.

Check the alignment of the wings with the body lines and adjust up or down if needed. Use the supplied shims and install them between the bumper bracket (Step 4) and the frame. Install the shim between the bracket and vehicle frame.



Step 7.

Tighten all the bolts on the bottom of the bumper. Inspect the alignment of the bumper wing with reference to the body. If the wing is tilted up in the front, use one of the supplied shims to level the bumper.

Loosen the bolts and then install the shim between the frame and bumper bracket at the indicated position (photo on right) on the side of where the wing is tilted up. Tighten the bolts and inspect. Repeat if necessary on other side.

Tighten side bolt as installed in step 4 – (not shown in photograph).



Step 8.

Using a shallow socket and extension, install the two rearmost 12mm bolts with lock and flat washers.

Step 9.

Torque bolts to spec in following order:

Rearmost bottom 14mm bolts – 118 lbs.ft

Front frame bracket 14mm bolts – 118lbs.ft

Rearmost 12mm bolts above receiver – 100 lbs.ft

Torque the 1/2" bolts that secure the wings to brackets to 100 lbs.ft

INSTALLING THE TIRE CARRIER



Step 1.

Pack the two supplied taper bearings with waterproof grease. Install the bigger of the two taper bearings in the bottom of the hub on the tire carrier. Next install the seal as shown in photograph. Tap the seal into position with a hammer. Pack the cavity in the hub full of grease, but leave the center open for spindle to go through.

Once the carrier is installed the installed zirk fitting can be used to grease the hub and bearings.





Tire Carrier latch and bolts

Step 2.

Install the latch on the tire carrier arm. Use 4 5/16" x 3/4" bolts and split washers installed into pre-tapped holes. Torque to 15 ft lbs.

If the bolts don't thread easily, use a 5/16"-18 tap to clean out any powder coating in the threads.



Step 3.

Install the rubber bump stop on the tab welded to the bottom of the swing arm. Use the supplied 5/16" lock nut and flat washer.



Step 4.
The pin will be pre-installed on the tire carrier.

Detail view of the Pin Assembly. From time to time, use a small amount of dry lubricant on the pin. Ensure that the pin slides freely in the sleeve.

To prevent the pin from corroding and getting stuck, it should be removed, cleaned and lubed on a regular basis.



Tire Carrier Installation

Step 5.

Slide the tire carrier onto the spindle and insert the 2nd taper bearing from the top. Install the flat washer and castle nut. Tighten castle nut and test the swing of the tire carrier. The swing-out be fairly tight, but not bind. Install cotter pin to lock castle nut in place. Pack the top of the hub with grease.

Install the hub cap by screwing it into the hub.



Step 6.

Install the spare tire carrier plate to the tire carrier using the supplied 3/8" x 1-1/2" bolts. To set the depth of the carrier, use a straight edge and place it across the back of the spare tire. Measure the distance from the straight edge to the mounting surface of the wheel. Subtract 1/4" from this and use this measurement to set the face of the mounting plate.

Step 7.

Install spare tire using the supplied lug nuts.

Step 8.

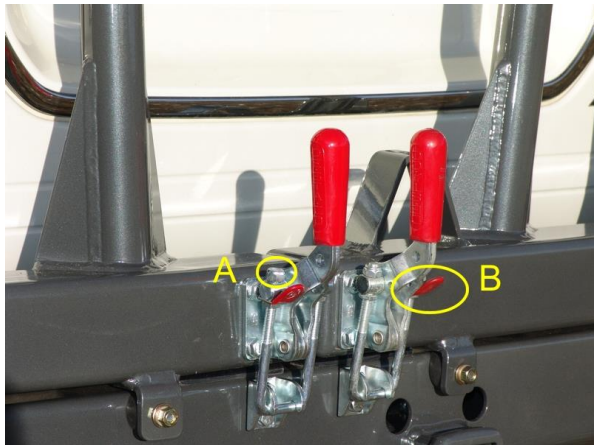
With the spare tire installed, adjust the latch by tightening up the U bolt. Release the lock nut and then tighten the top nut (A in the bottom picture on the right)



Hint: The little red tab as show in B on the picture below can be used to position the U portion of the latch under the latch bracket when closing the latch.

Use a thumb or forefinger to push down on the tab. This will move the U section of the latch forward and enable you to slide that under the latch bracket on the bumper. Then push the red handle forward to latch the bumper.

This keeps fingers away from possible injury.





Step 9.

Install LED License plate on bracket on tire carrier. Use the supplied hardware to secure the light to the tire carrier bracket. Route the harness through the hole in the bracket.



Step 9.

Run this harness along the back of the tire carrier Use the zip ties to secure the harness and/or the supplied screws and clips. The screws require drilling holes into the tire carrier arm.

Step 10.

Feed the harness through the slot between the bumper and the body. Route the harness over the frame (stay clear of the exhaust) and locate a suitable tail light source.

Tap the **brown wire** into the suitable **+12v** source and the **blue wire** to **ground**.

Finally test the license plate lights to ensure proper operation.



Mounting a hi-lift Jack

Most Hi-lift jacks should fit, however if the base does not slide into the bracket on the bumper, it might be necessary to grind it down slightly.

The jack is installed with the round handle against the tire carrier tube and the bar with the holes towards the outside of the vehicle. Install the socket head

cap screw with nut through the hole in the bracket on the bumper for the Hi-Lift base. Once the jack is installed this will prevent the base from re-positioning in the bracket with vibrations.



The 3/8" stud DOES NOT line up with a hole in the bar. It goes between the handle and the bar. Use the supplied 3/8" barrel nut to secure the bracket over the handle and bar

to keep it in position. The base and bracket on the bumper can be drilled to accept a lock.

Step 11.

Install the license plate on the tire carrier using the two 1/4" machine screws. The holes are tapped on the tire carrier face underneath the license plate light.

Step 12.

Close the tire carrier and close the latch. The tension on the latch is adjustable by tightening the 1/2" nuts to shorten the U bolt of the latch.

LADDER CARRIER INSTALLATION

The installation of the ladder carrier is the same as for the tire carrier, except that there is no license plate light or license plate on the carrier.

You have now successfully installed your bumper! Here are a couple of hints for using your new Slee bumper.

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1. Don't let go of the tire carrier(s) when you open it. The pin and safety stop is designed to stop the tire carrier from swinging out to far, but you could potentially damage the pin and or the safety stop.
3. Clean, inspect and re-lube the pins bi-annually to ensure smooth operation.
4. Annually inspect the bearings in the Swing-Outs by removing the cap and checking the condition of the grease in the hub. If you see rust or moisture, remove the carrier from the bumper. Remove the seal (replacements can be purchases from Slee Off-Road), clean and repack the bearings and re-install the seal. Lastly, Re-install the tire carrier and or ladder on the bumper.

Thank you for your purchase from Slee Off-Road! Visit us at www.sleeoffroad.com or email us at info@sleeoffroad.com. Follow us on Facebook and Instagram!

